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**UNITED STATES DEPARTMENT OF COMMERCE**  
**Patent and Trademark Office**

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
08/813,200	03/07/97	HIRANO	M 2342-0107P

002292 MMC2/0813  
BIRCH STEWART KOLASCH & BIRCH  
PO BOX 747  
FALLS CHURCH VA 22040-0747

EXAMINER

RAO, S

ART UNIT

PAPER NUMBER

2814

DATE MAILED: 08/13/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trad marks

*2 Ellis of Gottsberg -*

**Office Action Summary**

Application No.

08/813,200

Applicant(s)

HIRANO, MITSUHIRO

Examiner

Steven H. Rao

Art Unit

2814

**– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –**  
**Period for Reply**

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 June 2001.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☐ Claim(s) 10, 11, 16 and 18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 10, 11, 16 and 18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☒ Interview Summary (PTO-413) Paper No(s). 22
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

***R sponse to Amendment***

Applicants' amendment filed May 22, 2001 has been entered on June 5, 2001.

Therefore claims 10,11,16 and 18 as amended by the amendment are currently pending in the application.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 10,11, 16 and 18 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claims 10 and 11 recite a the atmospheric exhaust lines having one of its end connected to the load lock chamber, this recitation is not supported by the original specification.

It is suggested that Applicants' change the present recitation to the atmospheric exhaust line being connected to the vacuum exhaust line and its other end being an open end.

Claim 16 recites the <sup>(1)</sup>second vacuum exhaust line is connected to the substrate processing chamber this is not again not supported by the specification as originally filed, Applicants' may want to recite that the second vacuum exhaust line is connected to the first vacuum exhaust line and the load lock chamber. <sup>(2)</sup>The third vacuum exhaust line is recited as being connected to the load lock chamber and the first vacuum

exhaust line this is also not supported and may be changed to being connected to reaction oven and the first vacuum exhaust line.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 16 also recites an end of the local exhaust being in proximity to the dust generating portion and is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

This recitation is indefinite because being in proximity is indefinite.

Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 10, 11, 16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shiraiwa ( U.S. Patent No. 5,273,423) previously applied.

With respect to the claims the previous rejections are maintained and incorporated here by reference and the applicants' arguments are responded to in the response to the arguments section.

#### ***Response to Arguments***

Applicant's arguments filed 5/22/01 have been fully considered but they are not persuasive for the following reasons :

Applicants' state that the Examiner has used element 32 to in characterizing several of the claimed features.

It is noted for the record that fig. 2 describes several exhaust tubes 32,32b, 32c and 32d ( col. 5 lines 5-10) which is similar to applicants' claimed features ( also shown in drawings fig. 2 as 121,120 and 122). Therefore the examiner is using the element 32 to characterize only one of Applicant's recited element.

Element 32 b of Shiraiwa is similar to the applicants' local exhaust and element 32 is the chamber exhaust. Therefore Shiraiwa teaches both local and chamber exhausts.

Applicants' argue that w.r.t claim 16 their recited features namely the second vacuum exhaust line is connected to processing chamber and the first vacuum exhaust line and a third vacuum exhaust line being connected to load lock chamber and the first vacuum exhaust line is not taught by Shiraiwa.

As stated above, the connections of the second and third vacuum chambers recited above and new matter and unless the Applicants' can show support in the original specification constitute new matter and will not be entered.

Secondly, assuming arguendo that the recitation is not new matter, Shiraiwa discloses in fig. 2 shows local exhaust line 32 b connected to processing chamber 61 and first vacuum line 32. third exhaust line 32 c is connected to load lock chamber 8 through gate and valve 28 ( col. 2 lines 28-32) and first vacuum exhaust line 32.

Applicants' argue that a single pump can be used in the invention as stated in the specification.

However none of the claims recite the single vacuum pump element and therefore is not considered.

Applicants' argue that the claimed cover ( recited in claim 18 ) is different from the prior art because they ( cover) are disposed on the wafers themselves but rather on the moving block portion better illustrated in fig. 2.

Again applicants' claim 18 recites, " a cover for covering a dust generation portion of said moving mechanism" only.

Limitations not recited in the claims need not be considered.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Application/Control Number: 08/813,200  
Art Unit: 2814

Page 6

Any inquiry concerning this communication should be directed to Steven H. Rao at telephone number 703-306-5945.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Olik Chaudhuri can be reached on 703- 306-2794. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703- 308-0956.

SL  
8/8/01

  
Olik Chaudhuri  
Supervisory Patent Examiner  
Technology Center 2800